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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,269	11/06/2006	Joseph L. Horijon	082671-0231	1273
22428 7590 10/26/2007 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER STRIEB, MICHAEL A	
			ART UNIT 4177	PAPER NUMBER
			MAIL DATE 10/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,269

Applicant(s)

HORIJON ET AL.

Examiner

Michael A. Strieb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/23/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The Examiner has not considered the non-patent literature specified in the Information Disclosure Statement because it was not supplied by the applicant and no reference number was included for identification of the document.

Specification

2. The disclosure is objected to because of the following informalities: Throughout the specification, the word "imposed" is often used and appears to the Examiner to have two meanings. In one sense, it seems to take the conventional meaning, that is, "obtruded or forced". In other regards, it seems to take the meaning of "desired", as in "desired displacement". This double meaning leads to confusion. An alternate nomenclature is recommended.

Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities: the claim refers to "an image" as elements (5,6,8,9,15,16), and then refers to "the camera" as elements (5,6,8,9,15,16). It is advised by the Examiner that in the second case, the element numbers be moved to just after "second image". Additionally, the claim states "a real displacement of the object (3,10)(3)". This use of multiple references to the same element number is confusing and unnecessary. Appropriate correction is required.

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4. Claim 2 is objected to because of the following informalities: the term “anobject” should read “an object”. Appropriate correction is required.

5. Claim 5 is objected to because of the following informalities: the claim reads “as claimed in any one of the preceding claims according to claim 1”. The Examiner suspects this phrasing was an oversight during the preliminary amendment. The Examiner suggests the applicant strike through the phrase “in any one of the preceding claims”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “imposed” in claim 1, as it is used in its second appearance, is used by the claim to mean “desired”, while the accepted meaning is “forced.” The term is indefinite because the specification does not clearly redefine the term.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Isogai et al (US 2002/0108239 A1).

Regarding **claim 1**, Isogai et al disclose a method for calibrating at least one device that comprises a camera, characterized in that an object having at least on reference element is brought into an image area of the camera, after which a first position of the reference element relative to the device is determined from an image made by the camera (paragraph 0032), then a displacement relative to the device is imposed on the object (paragraph 0034), a second position of the reference element relative to the device is determined from a second image made by the camera (paragraph 0036), after which a real displacement of the object relative to the device is determined from the first and second relative positions, which real displacement is compared with the imposed displacement (paragraph 0028, 0037).

Regarding **claim 3**, Isogai et al further disclose that the object has at least four reference elements whose positions relative to each other are known (paragraph 0043) while at least two reference elements are perceived during the making of an image by means of the camera (paragraph 0044).

Regarding **claim 4**, Isogai et al further disclose that the positions of the reference elements relative to each other are determined from an image made by means of the camera (paragraph 0037).

Regarding **claim 5**, Isogai et al further disclose that the object has a number of reference elements (paragraph 0039).

10. Claims 2, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Okamoto et al (US 2001/0012985).

Regarding **claim 2**, Okamoto et al disclose a method for calibrating a number of devices positioned side by side which each comprise a camera, characterized in that an object having reference elements is brought into an image area of at least two camera of at least two devices, after which first positions of at least one reference element are determined relative to a first device, second positions of at least one reference element are determined relative to the second device, after which the position of the second device relative to the first device is determined from the first and second relative positions of the reference elements (paragraph 0107, Figure 17).

Regarding **claim 7**, Okamoto et al further disclose that the object has at least four reference elements whose positions relative to each other are known while at least two reference elements are perceived during the making of an image by means of the camera (paragraph 0131).

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Regarding **claim 8**, Okamoto et al further disclose that the positions of the reference elements relative to each other are determined from an image made by means of the camera (paragraph 0106).

Regarding **claim 9**, Okamoto et al further disclose that the object has a number of reference elements (paragraph 0107, Figure 17).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isogai et al (US 2002/0108239 A1) in view of Kobayashi (US 5,692,070).

Regarding **claim 6**, Isogai et al disclose the invention as applied to claim 5 above.

Isogai et al do not disclose that the object is a plate on which a number of marking elements serving as reference elements are provided in a grid pattern.

Kobayashi discloses that the object is a plate on which a number of marking elements serving as reference elements are provided in a grid pattern (Figure 13A).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to combine Kobayashi with Isogai et al. The substitution of one known element (a plate) for another would have yielded predictable results to one of

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ordinary skill in the art. Further, the use of a grid pattern for calibration is well known in the art.

Therefore, it would have been obvious to combine Kobayashi with Isogai et al to obtain the invention as disclosed in claim 6.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al (US 2001/0012985) A1 in view of Kobayashi (US 5,692,070).

Regarding **claim 10**, Okamoto et al disclose the invention as applied to claim 9 above.

Okamoto et al do not disclose that the object is a plate on which a number of marking elements serving as reference elements are provided in a grid pattern.

Kobayashi discloses that the object is a plate on which a number of marking elements serving as reference elements are provided in a grid pattern (Figure 13A).

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to combine Kobayashi with Okamoto et al. The substitution of one known element (a plate) for another would have yielded predictable results to one of ordinary skill in the art. Further, the use of a grid pattern for calibration is well known in the art.

Therefore, it would have been obvious to combine Kobayashi with Okamoto et al to obtain the invention as disclosed in claim 10.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Jackson et al (US 2002/0189115 A1) "Self-calibrating position determination system"

Palm (US 5,699,444) "Methods and apparatus for using image data to determine camera location and orientation"

Friedman (US 3,671,748) "Method and apparatus for positioner calibration system"

15. Any response to this office action should be faxed to (571) 273-8300 or mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand - delivered responses should be brought to:

Customer Service Window
Randolph Building
401 Dulany Street


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Strieb whose telephone number is 571-270-3528. The examiner can normally be reached on Monday-Friday 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAS


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